

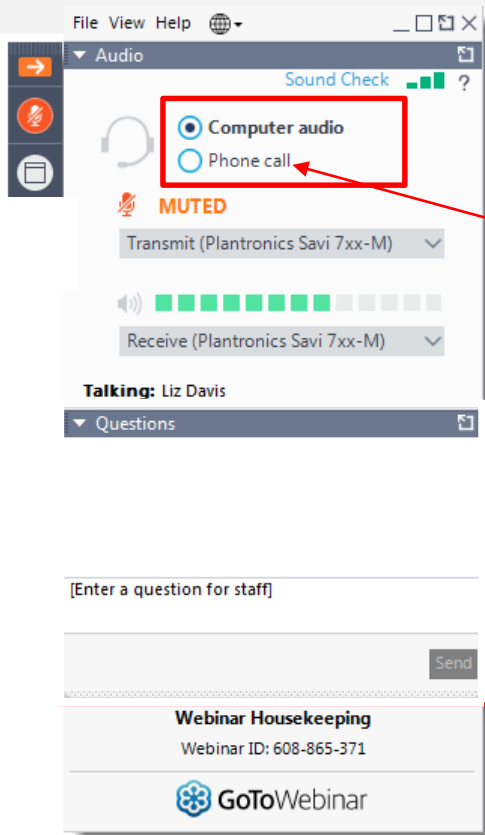


ASX CHES Replacement

Project Webinar

11 May 2018

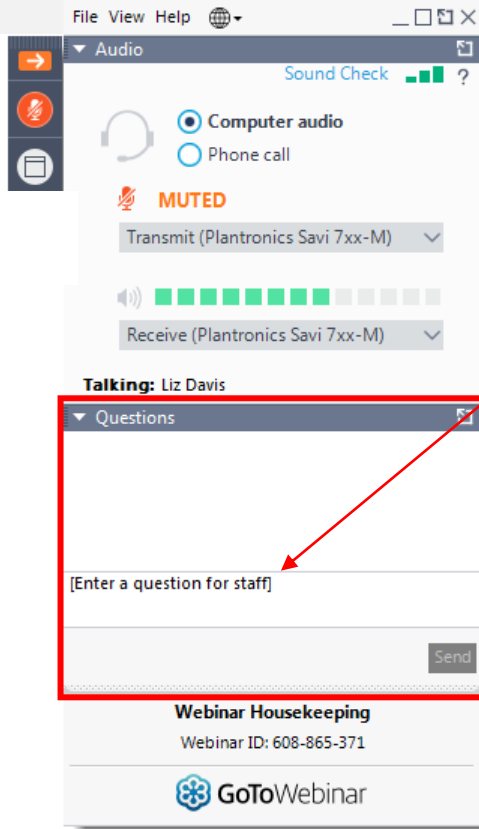
Housekeeping: Audio Trouble Shooting



Your Participation

- Having trouble hearing via Computer Audio? Switch to Phone call!
- Refer to your registration and / or reminder email for dial in details

Housekeeping: How to submit questions



Your Participation

- To submit your text questions and comments use the Questions panel
- Note that your questions will not be seen by other attendees

For more information - refer to the webinar tips published on the ASX [CHESS Replacement web page](#)

Presenters and introductions



Cliff Richards

Executive General
Manager,
Equity Post Trade



Keith Purdie

Senior Manager,
Equity Post Trade



Karen Webb

Senior Manager,
Equity Post Trade

Agenda

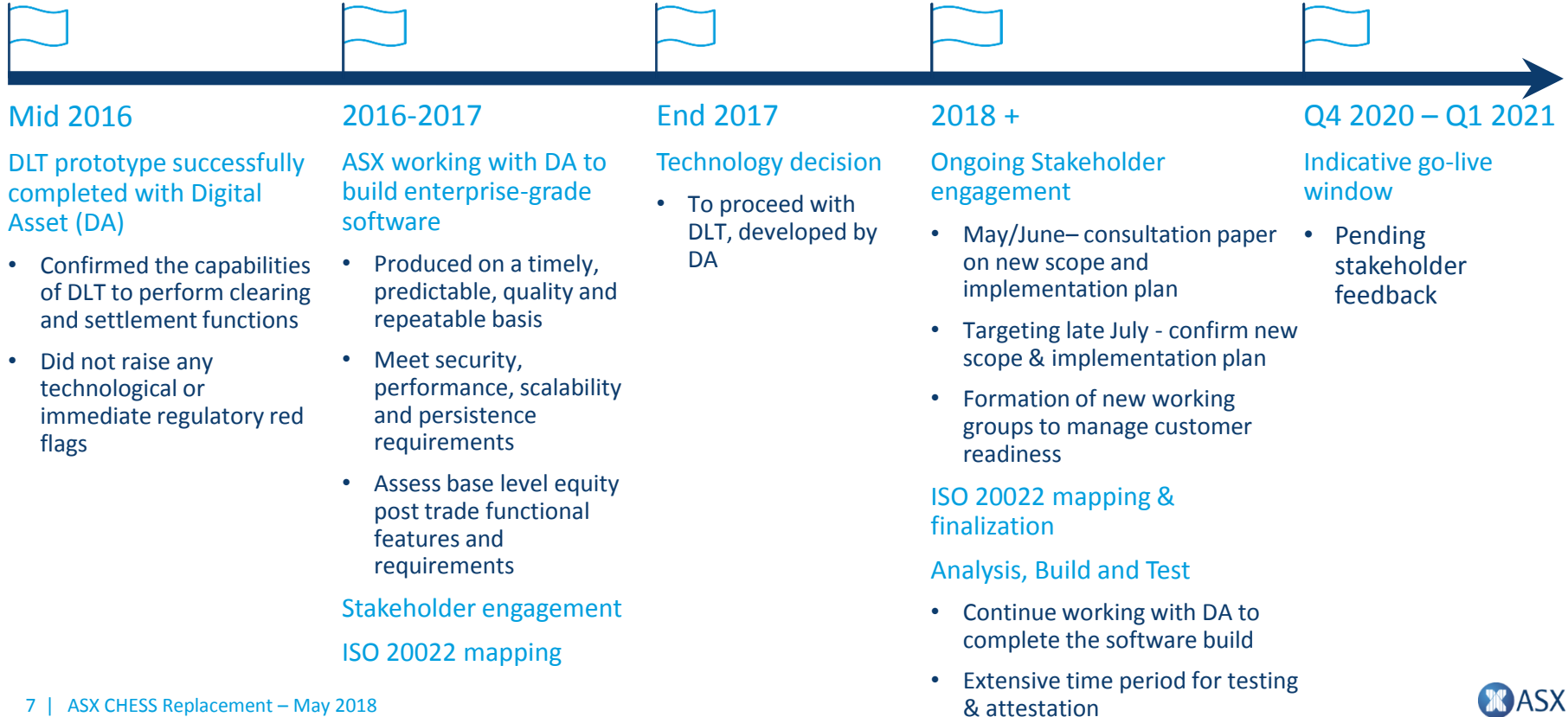
Project Update

Consultation Paper Overview

Q&A

Project Update

Key Milestones



Consultation Paper Overview: New Scope and Implementation Plan

Introduction

- > The consultation paper on CHES Replacement: New Scope and Implementation Plan was released by ASX on 27 April 2018
- > The paper sets out:
 - Changes to be delivered in connection with the new system through new business features
 - An explanation of the different connectivity options to the Digital Asset platform, including what it means to take a node
 - A proposed migration and implementation plan
- > Stakeholders have eight weeks to provide their feedback. Written submissions are due by **22 June 2018**

Chapter 2 - New Features for CHES Replacement

New features targeted to be implemented on Day 1

Account information

- > Common investor number
- > Additional investor information
- > Centralised data capture & storage
- > Standardised registration details

Pre-settlement

- > Settlement lock for CHES holdings
- > Bilateral transaction matching
- > Transfer of novated equity transactions between CPs
- > Additional preliminary payment notifications
- > Settlement lock for issuer sponsored holdings
- > Single access point to validate SRNs

Settlement

- > Non-batch DVP bilateral settlement
- > Settlement message enhancements

- > Settlement in foreign currencies
- > Optional early settlement
- > Auto-borrow

Corporate Actions

- > Electronic DRP & BSP elections
- > Electronic acceptance for entitlement offers
- > Electronic payment for entitlement offers
- > Transfer of CUM entitlement balance

Reporting

- > Continuous holding balance information
- > Electronic provision of holding statements and notifications

mFund

- > Real time cash settlement, 'hold' status and transfer capability
- > Sharing of investor details, automation of regular payments and switching between funds

Chapter 2 - New Features for CHES Replacement

New features to be implemented separately to CHES Replacement

- > Business requirements identified from the working group processes whose implementation is not contingent on the new system to replace CHES are outlined in:
 - Appendix 1 - Corporate Actions STP Phase 2; and
 - Appendix 2 - ASX Business-As-Usual processes

Chapter 2 - New Features for CHES Replacement

New features to be implemented through service releases post-Day 1

Account information

- > Aggregated view of holdings

Corporate Actions

- > Electronic processing of dividend claims
- > Electronic proxy voting

Participant structures

- > Participant models for clearing and settlement services

Chapter 3 - Adoption of ISO 20022 Messaging

- > ASX has committed to adopt ISO 20022 messaging standard for the new system in place of CHES External Interface Specification (EIS) proprietary messages
- > Consultation paper sets out ASX & SWIFT's progress in mapping the 'in scope' CHES messages to a consolidated and reduced set of ISO 20022 messages
 - High level gap analysis including key findings & approach (complete)
 - Detailed message mapping on an 'as-is' basis (complete)
 - Day 1 scope adjustments to message set (work has commenced)
- > Proposed approach to transition
 - Decommission CHES EIS messaging immediately after migration
 - ASX will not provide a protocol translation service

Chapter 5 - Technical Solution

- > The technical solution is built on a permissioned ledger. Permissioned users will be able to initiate transactions, but only ASX will have the authority to commit transactions to the ledger
- > Users will have several options for connectivity, ranging from:
 - Taking a node in the distributed ledger
 - ASX intends to offer user nodes as a managed service
 - Message based connection to the distributed ledger
 - FIX messages for AMO integration and ISO 20022 for other users
 - Secure web browser portal
- > Data API will allow participants to access data they are entitled to see
 - Expected to become primary method for delivery of demand reporting
 - Users with a node will be able to access data in real time via their node (as well as the Data API)
- > The networks used will likely include ASX Net, internet VPN and SWIFTNet
- > Digital Certificates will be used at the organisational level for authentication, encryption and signing
- > CHES PC, CHES Access and CHES Messaging will be decommissioned

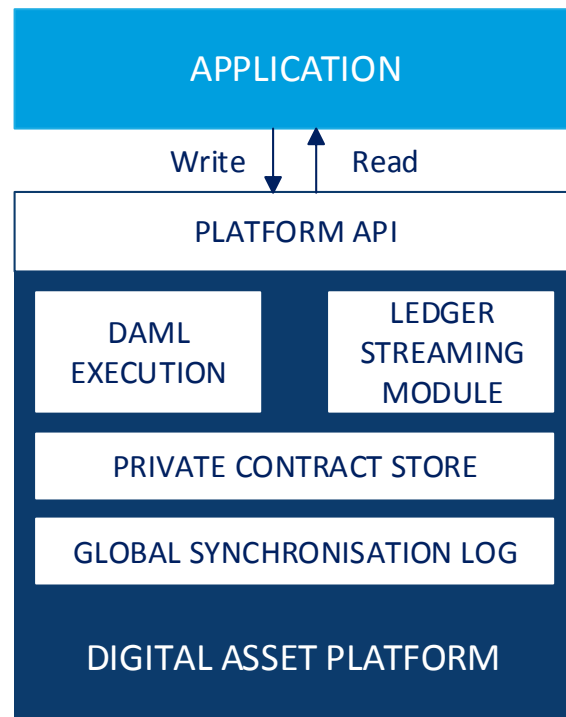
Chapter 6 - Digital Asset (DA) Platform and Node Access

The new system will consist of a post-trade cash equities application which interfaces with the DA Platform

- > The Digital Asset Platform processes the business logic for the cash equities market and sends this to the distributed ledger
- > The distributed ledger is split into two components
 - Private Contract Store (PCS)
 - Global Synchronisation Log (GSL)

Chapter 6 - Digital Asset (DA) Platform and Node Access

- > ASX will store all data in its PCS. Participants with a node will have their own privately segregated PCS, which contains all validated contracts to which the user is a party
- > The GSL will be identical across ASX and all other nodes on the distributed ledger – it is the replicated log of immutable evidences of transactions or events
- > The consultation paper provides further explanation of:
 - The application layer
 - The platform layer
 - Nodes (direct node participation, integration, instruction flow)
 - Integration with nodes, including usage of DAML Software Development Kit



Chapter 7 - Testing and Release Management

- > The consultation paper steps through a high level timeline, and speaks to the intention for an agile and iterative approach to software development and testing
- > Details the purpose of the various test environments, and provides examples of the types of information that will be provided in the documentation

Indicative High-level Timeline	2018				2019				2020				2021
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
ASX Analysis, Build & Test (iterative)	[Active]												
Corporate Actions STP Phase 2			[Active]										
Documentation Release (iterative)			[Active]										
Customer Analysis, Build & Test			[Active]										
Customer Development & Test Environments					[Active]								
Industry Wide Testing									[Active]				
Accreditation Testing											[Active]		
Indicative Go-Live Window (Date TBC)													[Active]

Chapter 8 - Migration and Implementation Approach

The consultation paper describes the overall system migration and implementation approach, as well as specific data migration and cleansing activities.

- > **Approach** - a single cutover weekend from current CHES to the new system
 - Based on feedback from stakeholders, a review of other large scale ISO 20022 migrations/similar transitions, and recent ASX experience with other projects
 - The rationale for this style of approach includes reducing complexity and risks associated with a phased transition

Chapter 9 - Ongoing Stakeholder Engagement

ASX will continue to engage with stakeholders, including throughout the development, testing and implementation phases.

- > The role of the Business Committee and ISO 20022 Technical Committee will continue
- > New industry working groups, with a broad range of stakeholders, will be formed for transition planning
 - Connectivity & Integration working group
 - Implementation & Transition working group
- > Series of focused stakeholder sessions e.g. designing solutions to Day 1 requirements
- > AMO working group will continue to be supported
- > Additional public consultations e.g. proposed ASX Operating Rule changes
- > Industry webinars will continue on a regular basis

Q&A

Next steps and where to find more information

- > Written submissions in response to Consultation Paper due 22 June 2018
- > ASX is targeting announcement Day 1 scope and implementation plan in late July 2018
- > Ongoing engagement throughout 2018 (e.g. webinars, ISO 20022 Technical Committee meetings, and DLT demonstrations)
- > The presentation and recording of this webinar will be available on the CHES Replacement webpage shortly
- > Next webinar will be held after ASX's response to Consultation Paper feedback
- > More information available on the ASX CHES Replacement website: www.asx.com.au/chesreplacement
- > Or email the ASX project team: CHESReplacement@asx.com.au

Thank you.